Committee to Minimize Toxic Waste

4/18/2000

Mike Bandrowski Chief
Office of Radiation and Compliance Assurance
US EPA/Region IX
75 Hawthorne Street
San Francisco, CA. 94105-3901

Dear Mr. Bandrowski,

Since September of 1997 the US EPA has been participating in collecting split samples from the ambient air monitor located outside the Lawrence Hall of Science, NNW of Lawrence Berkeley National Laboratory's (LBNL) National Tritium Labeling Facility's (NTLF) emissions stack just 110 meters away.

In August of 1998 the Committee to Minimize Toxic Waste received a letter from Ron Pauer of LBNL's Environmental Protection Group, dated August 13,1998 updating information on tritium shipments, releases, disposal and recycling at the NTLF (attachment 1).

According to this update no new tritium had been shipped to the NTLF inventory between September 1, 1996 and the date of the letter August 13, 1998. Furthermore, based on the substantiating shipping documents for tritiated product shipments from the NTLF, it appears that all the tritium at NTLF inventory had been depleted by August 19,1997 (attachment 2) which was a couple of weeks prior to EPA's participation in the split air sampling program at the Lawrence Hall of Science. Was this a coincidence?

At a Berkeley City Council Meeting held on or about October 20,1998 Philip Williams$_1$ NTLF Manager told the City Council that 11,000 curies of tritium had been shipped into NTLF inventory a couple of weeks earlier.

During a recent site visit to the NTLF on February 29,2000 I accompanied Bernd Franke of IFEU, City of Berkeley's independent contractor, to the Lab as a community representative. During the visit Bernd Franke was told by Philip Williams that the last shipment of tritium into NTLF inventory was the 11,000 curie shipment of October 1998 and that currently there are 7,000 - 8,000 curies of tritium left on the uranium bed.

That would mean that between September 1,1996 and February 29,2000, during a period of 42 months (3 1/2 years) approximately 8500 curies of tritium was used for tritiations, reflecting an annual average of about 2400 curies. During the preceding 14 years (from 1982-1995) the annual average had been 11,700 curies which means that during the past 3 1/2 years the NTLF has operated at approximately *20%* of its typical capacity.

To verify that the numbers presented here are correct we are asking you to request LBNL/DOE to provide the following inventory related information:

1. All shipping documents pertaining to shipments of tritium into NTLF inventory since September 1, 1996.
2. All shipping documents pertaining to tritiated product shipped out of NTLF since August19, 1997.
3. All shipping documents pertaining to shipments of recaptured/recycled tritium shipped out of NTLF since January 1,1996. Receiving documents from the Lawrence Livermore National Laboratory (LLNL) should be included to indicate the actual amount of tritium that was received by LLNL and logged into DOE's inventory data base.
4 All documentation pertaining to transfers of tritium waste from the NTLF to LBNL's Hazardous Waste Handling Facility (HWHF) since January 1, 1996.
5. All shipping documents pertaining to tritium waste shipped out of LBNL's HWHF since 3/31/1997.

If the numbers presented in this letter are correct it follows that EPA's air sampling results, obtained at the Lawrence Hall of Science since Sept. of 1997 are not a true reflection of typical operating conditions at the NTLF.

Furthermore, a recent report by Owen Hoffman dated February 28, 2000, titled Review of Atmospheric Dispersion Models to Predict Tritium Concentrations Resulting from Releases from the NTLF (p. 4), states the following: "Each day, the release duration of tritium from the stack is between 30 minutes and 3 hours", during working hours which also is the time when school children visit the Hall of Science. If tritium emissions occur for an average of two hours of each working day (approximately 40 hours of emission per month, i.e. 5% of a total of 720 hours), it follows that 95% of the time when the air sampler is operating there are no emissions. What this indicates is that a monthly average, such as EPA reports, in this context is completely meaningless for the children and workers at the Lawrence Hall of Science.

I would greatly appreciate it if you could expedite the forwarding of the requested tritium inventory related information to the Committee to Minimize Toxic Waste, The Alameda County Board of Education, the members of LBNL's Tritium Environmental Sampling Task Force, Berkeley City Council and Bernd Franke (IFEU) by April 25, 2000.

Sincerely,

Pamela Sihvola, Co-chair
POB 9646
Berkeley, CA 94709